

IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Currently Amended): A composite product, comprising:

a transparent substrate;

a multilayer system comprising a functional layer and a layer C; and

a cover layer;

wherein:

the multilayer system has a solar-control function or an energy-control function;

the functional layer reflects at least some radiation of the solar spectrum;

the layer C comprises silicon or aluminum [nitride, carbonitride, oxynitride or oxycarbonitride], or a mixture of the two;

the layer C is surmounted by the cover layer;

the cover layer is an oxide-based mechanical protection layer, the oxide being optionally oxygen-substoichiometric or oxygen-superstoichiometric and/or optionally nitrided; and

the cover layer comprises at least one of:

(i) at least one titanium oxide ~~containing~~ comprising another metal M given by the formula $TiM_pO_xN_y$ where ~~p~~ and y may be zero;

(ii) at least one mixed oxide ~~containing~~ comprising Zn and at least one other element, the at least one mixed oxide optionally being doped with a further at least one element chosen from Al, Ga, In, B, Y, La, Ge, Si, P, As, Sb, Bi, Ce, Ti, Zr, Nb, Ta and Hf; and

(iii) at least one oxide ~~containing~~ comprising Zr and at least one other metal.

Claims 2-6 (Cancelled).

Claim 7 (Previously Presented): The composite product according to claim 1, wherein the cover layer comprises the at least one oxide (ii), the at least one oxide (ii) being a mixed oxide comprising zinc and tin (ZnSnO_x), zinc and titanium (ZnTiO_x), or zinc and zirconium (ZnZrO_x).

Claim 8 (Previously Presented): The composite product according to claim 1, wherein the cover layer comprises the at least one oxide (ii), the at least one oxide (ii) being doped with at least one other element chosen from Al, Ga, In, B, Y, La, Ge, Si, P, As, Sb, Ce, Ti, Zr, Nb, Hf and Ta.

Claim 9 (Cancelled).

Claim 10 (Previously Presented): The composite product according to claim 1, wherein the cover layer comprises the at least one oxide (iii), the at least one oxide (iii) being doped with at least one other element chosen from Al, Ga, In, B, Y, La, Ge, Si, P, As, Sb, Ce, Ti, Zn, Nb, Hf and Ta.

Claim 11 (Currently Amended): The composite product according to claim 1, wherein the cover layer comprises a superposition of oxide layers including a combination of ZnO/TiO_2 , $\text{Zn}_r\text{Sn}_s\text{Sb}_t\text{O}_x/\text{TiO}_2$, $\text{Zn}_r\text{Sn}_s\text{Al}_u\text{O}_x/\text{TiO}_2$ and $\text{Zn}_{r,x}\text{O}_x/\text{TiO}_2$ - $\text{Zn}_r\text{Zr}_y\text{O}_x/\text{TiO}_2$ layers.

Claim 12 (Previously Presented): The composite product according to claim 1, wherein the oxide layer has a thickness of about 15 nm or less.

Claim 13 (Previously Presented): The composite product according to claim 1, wherein the layer C further comprises at least one other metallic element.

Claim 14 (Previously Presented): The composite product according to claim 1, wherein the layer C has a thickness of about 5 to about 60 nm.

Claim 15 (Cancelled).

Claim 16 (Previously Presented): The composite product according to claim 1, wherein the functional layer comprises at least one metallic or metal-nitride-based layer.

Claim 17 (Previously Presented): The composite product according to claim 1, comprising a dielectric final sequence of layers including oxide/silicon nitride/oxide.

Claim 18 (Previously Presented): The composite product according to claim 1, comprising the following sequence:

Si₃N₄/ZnO/Ag/ZnO/Si₃N₄/cover layer

or Si₃N₄/ZnO/Ag/ZnO/Si₃N₄/ZnO/Ag/ZnO/Si₃N₄/cover layer

optionally with a metal blocking layer in contact with at least one of the silver layers.

Claim 19 (Previously Presented): The composite product according to claim 1, wherein the composite product substantially preserves its properties after a heat treatment.

Claim 20 (Previously Presented): A glazing assembly, comprising the composite product of claim 1.

Claim 21 (Currently Amended): A process for improving mechanical resistance of a transparent substrate, comprising applying a multilayer system comprising a functional layer and a layer C, and a cover layer to the transparent substrate;

wherein:

the multilayer system has a solar-control function or an energy-control function;

the functional layer reflects at least some radiation of the solar spectrum;

the layer C comprises silicon or aluminum [nitride, carbonitride, oxynitride or oxycarbonitride], or a mixture of the two;

the layer C is surmounted by the cover layer;

the cover layer is an oxide-based mechanical protection layer, the oxide being optionally oxygen-substoichiometric or oxygen-superstoichiometric and/or optionally nitrided; and

the cover layer comprises at least one of:

(i) at least one titanium oxide ~~containing~~ comprising another metal M given by the formula $TiM_pO_xN_y$ where ~~p~~ and y may be zero;

(ii) at least one mixed oxide ~~containing~~ comprising Zn and at least one other element, the at least one mixed oxide optionally being doped with a further at least one element chosen from Al, Ga, In, B, Y, La, Ge, Si, P, As, Sb, Bi, Ce, Ti, Zr, Nb, Ta and Hf; and

(iii) at least one oxide containing Zr and at least one other metal.

Claim 22 (Cancelled).

Claim 23 (Previously Presented): The process according to claim 21, wherein the cover layer comprises the at least one oxide (ii), the at least one oxide (ii) being a mixed oxide comprising zinc and tin (ZnSnO_x), zinc and titanium (ZnTiO_x), or zinc and zirconium (ZnZrO_x).

Claim 24 (Currently Amended): The process according to claim 21, wherein the cover layer comprises a superposition of oxide layers including a combination of ZnO/TiO_2 , $\text{Zn}_r\text{Sn}_s\text{SB}_t\text{O}_x/\text{TiO}_2$, $\text{Zn}_r\text{Sn}_s\text{Al}_u\text{O}_x/\text{TiO}_2$ and $\text{Zn}_r\text{Fe}_v\text{O}_x/\text{TiO}_2$ - $\text{Zn}_r\text{Zr}_y\text{O}_x/\text{TiO}_2$ layers.